

Title (en)
MAGNETIC CORE AND PROCESS FOR PRODUCING SAME

Title (de)
MAGNETKERN UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
NOYAU MAGNÉTIQUE ET SON PROCESSUS DE PRODUCTION

Publication
EP 2905791 A1 20150812 (EN)

Application
EP 13843337 A 20130927

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Abstract (en)
The present invention provides a magnetic core which can be produced with improved productivity without increasing a material cost and has required magnetic and mechanical properties and a process for producing the same. The magnetic core is produced by compression molding and thereafter thermally hardening iron-based soft magnetic powder having resin films formed on surfaces of particles thereof. The resin film is an uncured resin film formed by dry mixing the iron-based soft magnetic powder and epoxy resin containing a latent curing agent with each other at a temperature not less than a softening temperature of the epoxy resin and less than a thermal curing starting temperature thereof. The iron-based soft magnetic powder having the resin films formed on the surfaces of the particles thereof is compression molded by using a die to produce a compression molded body. The compression molded body having the resin films formed on the surfaces of the particles thereof is thermally hardened at a temperature not less than the thermal curing starting temperature of the epoxy resin

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